

IN THE CLAIMS:

Please amend claims 1 and 2, and add new claims 12-14, as follows:

1. (Amended) A processing apparatus for removing an oxide film from a surface of an object to be processed, the processing apparatus comprising:

a processing container accommodating the object to be processed therein;

an active gas species generating unit for producing active gas species;

A2 a heater arranged outside the processing container to heat the object to be processed;

a transparent window formed in the processing container between the heater and the object to be processed, the transparent window sheltering the interior of the processing container from the outside in an airtight manner and also allowing heating energy from the heater to pass through; and

a shielding plate provided in such a way that the shielding plate can be inserted into or extracted from a gap between the object and the transparent window;

wherein, on condition that the shielding plate is closed to insulate irradiation heat radiated from the transparent window to the object to be processed, the processing apparatus allows the oxide film formed on the surface of the object to react with the active gas species, thereby forming a product film; and subsequently,

the processing apparatus opens the shielding plate so as to apply irradiation heat irradiated from the heater to the product film through the transparent window and further heats the product film to a predetermined temperature for vaporization, thereby removing the product film.

2. (Amended) A processing apparatus for removing an oxide film from a surface of an object to be processed, the processing apparatus comprising:

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a first processing chamber having an active gas species generating unit for producing active gas species and also allowing the oxide film formed on the surface of the object to react with the active gas species under a condition of low temperature, thereby forming a product film;

a second processing chamber having a heater for heating the object to be processed and allowing the heater to heat the product film formed on the surface of the object to a predetermined temperature for vaporization, thereby removing the product film formed in the first processing chamber; and

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ent transporter for transporting the object on which the product film is formed in the first processing chamber between the first processing chamber and the second processing chamber.

10. (New) A processing apparatus according to claim 5, wherein the transfer chamber is connected with a load-lock chamber.

11. (New) A processing apparatus according to claim 5, wherein the transfer chamber is connected with a cooling chamber.

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12. (New) A processing apparatus according to claim 1, wherein the heater is actuated after finishing the step of forming the product film.

13. (New) A processing apparatus according to claim 1, further comprising:

a shaft connected with the shielding plate;

a driver arranged outside the processing container for driving the shaft; and

a seal for airtight sealing between the shaft and a wall of the processing container;

wherein the shielding plate is inserted into or extracted from a gap between the object and the transparent window by actuating the driver.